

REMARKS

Reconsideration and allowance of the application are respectfully requested.

1. Election of Group I

Applicant hereby elects Group I, Claims 1-7. This election is made without traverse.

Claims 8-16 have now been canceled and will be filed for examination in one or more divisional patent applications in due course.

2. Claim Objections to Claims 1 and 3

Claims 1 and 3 have been amended to obviate the objections.

3. Claim Rejections to Claims 3 and 4 under 35 USC 112

Claim 3 recites scanning the position of the microarray to place different locations within a DNA cell in the DFWM system to obtain different DFWM signals from the DNA cell. This feature is based on high spatial selectivity of the DFWM system and is referred to as "intro-spot spatial resolution in [0052] of the original specification. The rejection under 35 USC 112, 2nd paragraph is respectfully requested to withdraw.

Claim 4 is definite in its current form. See the description in [0049]-[0051] and [0055]-[0071]. The patent office is respectfully requested to withdraw the rejection under 35 USC 112, 2nd paragraph.

5. Claim Rejections to Claims 1-7 under 35 USC 103

Claim 1 has been amended to recite a use of a single template located between the microarray and an optical detector to include holes arranged to selectively transmit the DFWM signal from the microarray to the optical detector and to block

pump light and probe light in the DFWM system from entering the optical detector. The cited prior art references, either collectively or individually, fail to disclose the combination in the amended Claim 1. Therefore, the amended Claim 1 is patentable.

Claim 2 has been amended as an independent claim and recites using the measured signal in the blank area to determine a level of hybridization and washing in preparing the DNA cells and background optical noise. Nothing in the cited prior art suggests this feature and the combination in the amended Claim 2. As such, claim 2 as amended is patentable.

Claim 3 has been amended as an independent claim. Amended Claim 3 recites scanning the position of the microarray to place different locations within a DNA cell in the DFWM system to obtain different DFWM signals from the DNA cell. This feature is based on high spatial selectivity of the DFWM system and is referred to as "intro-spot spatial resolution in [0052] of the original specification.

The Office Action contends sections in McFarland and Sandstrom to show this feature. However, upon careful review of the cited portions in McFarland and Sandstrom, Applicant could not find any teaching of this feature. It is respectfully suggested that the Patent Office fails to make a prima facie showing of obviousness and the rejection must be withdrawn.

6. New Dependent Claims 18-22

These claims are newly added based on the original specification and are patentable based on at least the above arguments made for Claims 1, 2 and 3.

Applicant asks that all claims be allowed. Please apply the fee of \$1,050 for the Petition for Extension of Time fee, and any other applicable charges or credits, to deposit account 06-1050.

Respectfully submitted,

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